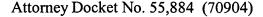
PTO/SB/33 (07-05)

Doc Code: AP.PRE.REQ Approved for use through xx/xx/200x. OMB 0651-00xx U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Docket Number (Optional) PRE-APPEAL BRIEF REQUEST FOR REVIEW 55884(70904) Filed Application Number 09/856,926-Conf. May 29, 2001 #6384 First Named Inventor Kazuhiko Tsuda et al. Art Unit Examiner 2629 D. L. Lewis Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. I am the applicant /inventor. assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) William J. Daley, Jr. is enclosed. (Form PTO/SB/96) Typed or printed name attorney or agent of record. Registration number (617) 439-4444 Telephone number X attorney or agent acting under 37 CFR 1.34. October 23, 2006 35,487 Registration number if acting under 37 CFR 1.34. NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

forms are submitted.

\*Total of





## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:

Kazuhiko Tsuda, et al.

**EXAMINER:** 

D.L. Lewis

U.S.S.N.:

09/856,926

GROUP:

2673

FILED:

May 29, 2001

Conf. No.

6384

FOR:

DISPLAY DEVICE, METHOD OF DRIVING SAME AND ELECTRONIC

**DEVICE MOUNTING SAME** 

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## CERTIFICATE OF EXPRESS MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail No. EV 892896486 US in an envelope addressed Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on October 23, 2006.

## **REMARKS: PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Sir:

The following remarks support Applicant's "Pre-Appeal Brief Request for Review" filed concurrently herewith in the above-referenced application. These remarks constitute no more than five pages, and are being filed with a Notice of Appeal.

No amendments are being filed with this request.

Claims 29, 42, 43 and 46 are acknowledged as being allowable.

Independent Claims 27, 38, 44, 51, 54, 59, 61, 63, 64 and 66, stand rejected under 35 U.S.C. §102(e) as being anticipated by Yamazaki [USP 6,522,319]. The remaining pending claims depend from one or more of the independent claims.

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Applicants respectfully request review of the Final Office Action in the above-referenced application.

Applicants are filing the within "Pre-Appeal Brief Request for Review" based on the following clear errors and/or omissions in the Final Office Action mailed on July 21, 2006.

## First Clear Error and/or Omission in the Final Office Action:

The Examiner has made a clear error and/or omission at least because Yamazaki does not describe "a display device which displays by selecting and scanning each signal line of a screen having pixels arranged in a matrix form and supplying through a data signal line a data signal to a corresponding pixel of the scanning signal line as selected and setting a quiescent period, in which all the scanning signal lines are set in non-scanning state, to be longer than a scanning period required for scanning each scanning signal line of the screen at least one time, wherein a sum of the scanning period and the quiescent period is set to be equivalent to one vertical period as set forth in claim 27. Applicants would note that the following analysis that is directed to claim 27 also would apply to distinguish the other independent claims, namely claims 27, 38, 44, 51, 54, 59, 61, 63, and 64. Thus, a discussion as to these other claims is not provided below.

The Final Office Action alleges that Yamazaki teaches a display device which displays by selecting and scanning each signal line of a screen having pixels arranged in a matrix form and supplying through a data signal line a data signal to a corresponding pixel of the scanning signal line as selected with reference to figure 1 and figure 3, items X and Y and with reference to the discussion in col. 15, lines 50-65, col. 18 lines 47-67 and col. 19, lines 7-14. It also further alleges that Yamazaki discloses the quiescent period clause of claim 27 with reference to figure 3, item VC or (50H-10H), col. 19 lines 1-3, figure 3 item VC (40H) > 10H, col, 18, lines 45-55, and figure 3, item 50H (f1), col. 19, lines 1-5, col. 20 lines 55-67.

Fig. 1 of Yamazaki shows an LCD panel having a display region of 40 rows and a non-display region of 160 rows, where the screen of the LCD panel is this composed of 200 rows.

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The discussion in lines col. 15, 50-65 further provides that the screen is composed of a plurality of scanning and signal lines (not shown in Fig. 1).

Col. 16, line 63 through col. 17, line 4 of Yamazaki provides that the "liquid crystal display panel 1 has for example, 200 lines (the number of scanning electrodes) and that it is in a full-screen display state when necessary" and further that as to the driving method, "a detailed description is included in the description which will be given below of embodiments." The first embodiment. which also refers to Figs. 2-4, describes a method of driving the LCD panel where a partial display is performed. In this driving method (see col. 17, lines 7-16), a 4MLS driving method is used in which four (4) scanning electrodes are simultaneously selected and in which simultaneous selection is sequentially performed on a basis of 4-line scanning electrodes. The discussion in col. 18, lines 49-55, also clearly describes that the sequential section is performed for scanning electrodes Y1 to Y4 at a first clock, the Y5 to Y8 at a second clock, … the Y37 to Y40 at the tenth clock.

As to the portions of Yamazaki referred to in the Office Action, col. 18 lines 47-67 provides that the selection voltage VH or VL is applied to the scanning- electrode *lines* selected. It is clear from this discussion that it is directed to the case where the electrode lines are selected using the 4MLS driving method in the first 40 lines of the screen. Col. 19, lines 7-14 describes the application of a polarity switching voltage to the scanning electrode lines.

The 4MLS technique described in Yamazaki can be used for the electrodes in the display region (D) because a partial display control signal PD in the Yamazaki device is set so as to be at a H level when the electrodes in the display region of the screen are being selected. Yamazaki also describes that upon completion of the selection of these electrodes/lines in the display region (i.e., the 40 electrodes referred to in Yamazaki), the partial display control signal PD is set to be at a L Level. It is further described in Yamazaki that as a result of the input of the low level partial control signal PD to a control terminal as that of the Y driver, all of the 200 scanning electrodes lines become fixed at the non-selection voltage level VC in a non-display access period of 40H of the 50H of one field.

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Thus, the circuitry and operation in Yamazaki does not involve the selection and scanning of each signal line but rather describes a 4MLS driving method in which groups of electrodes are scanned at a time. Yamazaki also teaches that the number of lines that can be grouped is a plurality of lines.

As also set forth in claim 27, the quiescent period is when all the scanning signal lines are set in non-scanning state, the quiescent period is longer than a scanning period required for scanning each scanning signal line of the screen at least one time, and the sum of the scanning period and the quiescent period is set to be equivalent to one vertical period.

The rejection is based on the erroneous conclusion that the 10H period during which electrodes Y1 to Y40 are scanned corresponds to the claimed scanning period required for scanning each signal line of the screen one time. The 10H period is the time required to scan 1/5 of the screen (*i.e.*, 40 of 200 lines) and thus does not meet the limitations in the claimed invention namely that the "scanning period required for scanning the screen one time," (*i.e.*, 200 lines in the screen of Yamazaki). Thus, even if the 40H period corresponded to a non-scanning time period, it would not correspond to a quiescent period being longer than the scanning period because the 10H scanning time shown in Figure 3 is not the time for scanning of each of the 200 electrode lines making up the screen.

If the 200 line screen in Yamazaki was arranged to be in a full screen display mode using the 4MLS technique, then Fig. 3 would have shown that the sequential selection and scanning process for all 200 electrodes would extend across the entire 50H period (i.e., 200 lines/40 lines per 10H = 50H). Thus, the quiescent time clearly could not be longer than the time period required for scanning each group of lines. Also, Yamazaki could not disclose, as is claimed by Applicants, that "the sum of the scanning period and the quiescent period is set to be equivalent to one vertical period."

Thus, the circuitry and operation in Yamazaki does not embody setting a quiescent period, in which all the scanning signal lines are set in non-scanning state, to be longer than a scanning period required for scanning each scanning signal line of the screen at least one time,

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wherein a sum of the scanning period and the quiescent period is set to be equivalent to one vertical period as is set forth in claim 27.

Applicants submit that all of the claims under final rejection are in condition for allowance and should be allowed, and that the Final Office Action should be withdrawn.

Applicants believe that there is no fee required for the submission of the Pre-Appeal Brief Request for Review. However, if for any reason one or more fees are required for the entry and consideration of that Request, these Remarks, or anything else being filed herewith, the Commissioner is hereby authorized and requested to charge Deposit Account No. 04-1105.

Respectfully submitted, Edwards Angell Palmer & Dodge, LLP

Date: October 23, 2006

Ву: \_\_\_\_\_\_

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